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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,575	03/29/2004	Dae-sung Park	P24730	9521
7055	7590	04/07/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			FRIEDHOFFER, MICHAEL A	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,575

Applicant(s)

PARK, DAE-SUNG

Examiner

Michael A. Friedhofer

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PM

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Carothers.

Peterson discloses a hinge including a leave 2; a leave 4; a conductor element 26 attached to a designated position of a "lower surface" or surface away from the opposite leave and a magnetic element 22 attached to a designated position of a panel of a door provided above or opposite the opposite leave. The conductor element and the magnetic element are installed such that they are opposite each other when the door is closed. The magnetic switch is contactless-type proximity switch.

Peterson does not disclose the switch being used for the opening and closing of a hood.

Carothers teaches the use of a magnetically operated switch mounted for the purpose of being operated by the opening and closing of the hood. While a contact type switch is shown, other types of magnetic switches, such as, reed switches and hall sensors may be utilized, which are contactless-type proximity switches.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Carothers to Peterson to utilize the magnetically operated switch in the hood switch of a front end module carrier with one leave being attached to the inner panel of a hood and the opposite leave being attached to the front end module carrier because the structure of the switch and its operation by the changing position of the magnet would not be altered by the object for which the switch is detecting movement and provides the switch with the purpose of utilizing the switch for operating a means for illuminating the underside of a hood. As for the switch operating an alarm light in the automobile, it is well known and established that light alarms or indicators are placed in automobiles to indicate that the trunk or hood are ajar and that these lights are connected to switches located in the trunk or hood and it is a matter of engineering design choice to connect the switch not only to the underhood light but also to the hood ajar indicator because this reduces the number of sensors needed to perform two functions.

Response to Arguments

3. Applicant's arguments filed January 18, 2005 have been fully considered but they are not persuasive. First, the two references are appropriate for combination because both Carothers and Peterson teach hinged doors upon which sensors are mounted to detect whether the door is opened or closed. Next, the specific structure of the Carothers switch is not the teaching being utilized but that proximity switches of various types, such as that taught by Peterson, may be used for detecting the position of the

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automobile hood, which is another type of door. The combination does indeed teach claimed features as presently recited in the all of the claims. As for contactless-type switch, the specific structure of Carothers is not the teaching, however, not only does Peterson teach that a contactless-type may be used, but Carothers teaches that contactless-type proximity switches are well known equivalents and may be utilized in the sensor. As for the lack of an alarm light, it is well known for hood switches to be connected to door ajar lights or "alarm lights" within an automobile and it would be obvious to not only use it for an underhood light but also for the indicator light because this would be for the purpose of reducing the number switches necessary to perform these well known functions.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Friedhofer whose telephone number is 571-272-1992. The examiner can normally be reached on Mon-Fri 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael A. Friedhofer
Primary Examiner
Art Unit 2832

maf